

AMENDMENTS TO THE CLAIMS

Please amend claims 2 and 4-9 as set forth below.

1. (CANCELED).
2. (CURRENTLY AMENDED) A portable terminal apparatus comprising:
a first receiving system for receiving a quadrature modulated signal and
converting the quadrature modulated signal into an intermediate-frequency signal for output;
a second receiving system comprising at least one system for receiving a BPSK binary phase shift keying modulated signal and converting the BPSK binary phase shift keying modulated signal into an intermediate-frequency signal for output;
an ~~IF~~intermediate frequency stage for processing both the intermediate-frequency signal of said first receiving system and the intermediate-frequency signal of said second receiving system; and
a signal processing system for processing the signal of said first receiving system that has been passed through said ~~IF~~intermediate frequency stage and the signal of said second receiving system that has been passed through said ~~IF~~intermediate frequency stage,
wherein said ~~IF~~intermediate frequency stage ~~has at least one of~~includes a variable gain amplifier for amplifying the intermediate-frequency signal of said first receiving system and the intermediate-frequency signal of said second receiving system and a quadrature demodulator for subjecting the intermediate-frequency signals that have been passed through the variable gain amplifier to quadrature demodulation for ~~output~~output,
wherein said signal processing system includes a phase shifter that generates an I signal and a Q signal by demodulating the intermediate-frequency signal output from said second receiving system so that said I signal and said Q signal coincide with each other in phase.
3. (CANCELED).
4. (CURRENTLY AMENDED) ~~A~~The portable apparatus as claimed in claim 2, wherein ~~when said IF stage has said quadrature demodulator, said signal processing system further includes a phase shifter that generates an I signal and a Q signal that coincide with each other in phase by demodulating the intermediate frequency signal output from said second receiving system through said quadrature demodulator, an adder that adds the I signal~~

and the Q signal that have passed through said phase shifter, and a correlator that demodulates said BPSK modulated signal based on sum of said adder.

5. (CURRENTLY AMENDED) A-~~The~~ portable terminal apparatus as claimed in claim 2, wherein when said IF stage has said quadrature demodulator, said signal processing system includes a correlator for demodulating said ~~BPSK~~ binary phase shift keying modulated signal on the basis of an I signal or a Q signal of said second receiving system obtained by demodulating the intermediate-frequency signal by said quadrature demodulator.

6. (CURRENTLY AMENDED) A-~~The~~ portable terminal apparatus as claimed in claim 2, wherein when said ~~IF~~ intermediate frequency stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for fixing gain of said variable gain amplifier at about a maximum gain in demodulating said ~~BPSK~~ binary phase shift keying modulated signal.

7. (CURRENTLY AMENDED) A-~~The~~ portable terminal apparatus as claimed in claim 2, wherein when said ~~IF~~ intermediate frequency stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for controlling gain of said variable gain amplifier to a maximum gain while maintaining linearity on the basis of a demodulated signal obtained by demodulating said ~~BPSK~~ binary phase shift keying modulated signal.

8. (CURRENTLY AMENDED) A-~~The~~ portable terminal apparatus as claimed in claim 2, wherein when said IF stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for controlling gain of said variable gain amplifier to about a maximum gain even with nonlinearity on the basis of a demodulated signal obtained by demodulating said ~~BPSK~~ binary phase shift keying modulated signal.

9. (CURRENTLY AMENDED) A portable terminal apparatus comprising:
a first receiving system for receiving a quadrature modulated signal and
converting the quadrature modulated signal into an intermediate-frequency signal for output;

a second receiving system comprising at least one system for receiving a ~~BPSK~~ binary phase shift keying modulated signal and converting the ~~BPSK~~ binary phase shift keying modulated signal into an intermediate-frequency signal for output;

an ~~IF~~ intermediate frequency stage for processing both the intermediate-frequency signal of said first receiving system and the intermediate-frequency signal of said second receiving system; and

a signal processing system for processing the signal of said first receiving system that has been passed through said ~~IF~~ intermediate frequency stage and the signal of said second receiving system that has been passed through said ~~IF~~ stage intermediate stage,

wherein when said IF stage includes a quadrature demodulator, said signal processing system includes a phase shifter that generates an I signal and a Q signal that coincide with each other in phase.